

**REMARKS**

**I. Formalities**

Applicant thanks the Examiner for considering the references cited with the form PTO-1449 submitted with the Information Disclosure Statement filed on June 9, 2005.

**II. Status of the Application**

By the present amendment, claims 9-11 have been amended and new claims 29-31 have been added to more fully cover various embodiments of the present invention. In addition, claims 1-8 are hereby cancelled without prejudice or disclaimer. Claims 9-17 and 29-31 are all the claims pending in the Application. Claims 1-11, 13-14 and 16 have been rejected.

The present amendment addresses each point of objection and rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

**III. Drawings**

The Examiner has objected to the drawings under 37 CFR §1.83(a) alleging that they fail to show gate electrode 107 as the two-layer film as described in the specification, and the Examiner has requested corrected drawing sheets in compliance with 37 CFR § 1.121(d). Applicant has submitted herewith (5) Replacement Sheets, including Figures 3(b), 3(c), 5(b), 5(c), 7, 8, 9 and 10, which show gate electrode 107 as a two-layer film.

As such, Applicant respectfully requests that the Examiner withdraw these objections.

**IV. Allowable Subject Matter**

Applicant thanks the Examiner for indicating that claims 12, 15 and 17 would be allowed if rewritten in independent form. Accordingly, Applicant hereby adds new claims 29, 30 and 31, which correspond to claims 12, 15 and 17, respectively, rewritten in independent form. Thus, Applicant respectfully submits that claims 29-31 are immediately allowable.

**V. Claim Rejections under 35 U.S.C. § 103**

**A. Claims 1-3 and 4-6**

The Examiner has rejected claims 1-3 and 4-6 under 35 U.S.C. § 103(a) as being unpatentable over the Prior Art as Admitted by Applicant, in view of U.S. Patent No. 6,124,153 to Lee *et al.* (hereinafter “Lee”), and further in view of U.S. Publication No. 2003/0025127 A1 to Yanai *et al.* (hereinafter “Yanai”).

Since claims 1-3 and 4-6 have been canceled without prejudice or disclaimer, the rejections with respect to these claims are now moot.

**B. Claim 5**

The Examiner has also rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over the Prior Art as Admitted by Applicant, in view of Lee, further in view of Yanai, and further in view of U.S. Patent No. 5,610,082 to Oh (hereinafter “Oh”).

Since claim 5 has been canceled without prejudice or disclaimer, the rejection with respect to this claim is now moot.

**C. Claims 7-8**

The Examiner has rejected claims 7-8 under 35 U.S.C. § 103(a) as being unpatentable over the Prior Art as Admitted by Applicant, in view of Lee, further in view of Yanai, and further in view of Japanese Patent Application No. 11307777 A to Okumura (hereinafter “Okumura”).

Since claims 7-8 have been canceled without prejudice or disclaimer, the rejections with respect to these claims are now moot.

**D. Claims 9-10**

The Examiner has rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over the Prior Art as admitted by Applicant, in view of Lee, further in view of Yanai, and further in view of Japanese Patent Application No. 2003-017502A to Nakamura (hereinafter “Nakamura”). Applicant respectfully traverses these rejections for *at least* the reasons set forth below.

In order for the Examiner to maintain a rejection under 35 U.S.C. §103, the Prior Art as admitted by Applicant, Lee, Yanai, Nakamura, or some combination thereof, must teach or suggest all of the limitations of claims 9 and 10. Applicant respectfully submits that neither the Prior Art as admitted by Applicant, Lee, Yanai, Nakamura, nor any combination thereof, teaches or suggests all of the limitations of claims 9 and 10.

**1. Independent Claim 9**

Independent claim 9 has been amended to recite (among other things):

...wherein said first gate electrode, said second gate electrode and said third gate electrode are formed under wires which connect to said impurity doping regions.

The Examiner acknowledges that neither the Prior Art as admitted by Applicant, Lee, nor Yanai, teaches or suggests the feature of a third gate electrode formed between said second active layer and said second gate electrode, as recited in claim 9. Nevertheless, the Examiner applies the cited Nakamura reference as allegedly teaching or suggesting this feature. Further, the Examiner alleges that it would have been obvious to one of ordinary skill in the art to combine the teachings of the Prior Art as admitted by Applicant, Lee, and Yanai, with those of Nakamura, to arrive at the invention recited in claim 9, and alleges that the motivation for doing so would have been for the advantage of having as low a current as possible when the device is supposed to be off. Applicant respectfully disagrees with the grounds of rejection.

Applicant submits that neither the Prior Art as admitted by Applicant, Lee, Yanai, Nakamura, nor any combination thereof, teaches or suggests the feature of a first gate electrode, a second gate electrode and a third gate electrode, which are formed under wires which connect to impurity doping regions, as recited in claim 9. Indeed, the cited Nakamura reference, which the Examiner relies upon as teaching a third gate electrode, provides no teaching or suggestion whatsoever that the electrode 17, the gate electrode above, and the gate electrode 13 are formed under wires which connect to impurity doping regions. Further, neither the Prior Art as admitted by Applicant, Lee, nor Yanai, remedy the deficient teachings of Nakamura.

Accordingly, Applicant respectfully submits that independent claim 9 is patentable over the applied references for *at least* these independent reasons. Thus, Applicant respectfully request that the Examiner withdraw this rejection.

**2. Independent Claim 10**

Independent claim 10 has been amended to recite (among other things):

...wherein said first gate electrode, said second gate electrode and said third gate electrode are formed under wires which connect to said impurity doping regions.

In view of the similarity between this recitation and the recitation discussed above with respect to independent claim 9, Applicant respectfully submits that arguments analogous to the foregoing arguments as to the patentability of independent claim 9 demonstrate the patentability of claim 10. As such, it is respectfully submitted that claim 10 is patentably distinguishable over the cited references. Thus, the allowance of this claim is respectfully solicited of the Examiner.

**E. Claims 11 and 16**

The Examiner has rejected claims 11 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Prior Art as Admitted by Applicant, in view of Yanai, and further in view of Nakamura. Applicant respectfully traverses these rejections for *at least* the reasons set forth below.

Independent claim 11 has been amended to recite (among other things):

...wherein said first gate electrode, said second gate electrode and said third gate

electrode are formed under wires which connect to said impurity doping regions.

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 9, Applicant respectfully submits that arguments analogous to the foregoing arguments as to the patentability of independent claim 9 demonstrate the patentability of claim 11. As such, it is respectfully submitted that claim 11 is patentably distinguishable over the cited references. Moreover, Applicant submits that the dependent claim 16 is allowable *at least* by virtue of its dependency on claim 11. Thus, the allowance of these claims is respectfully solicited of the Examiner.

**F. Claim 13**

The Examiner has rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Prior Art as admitted by Applicant, in view of Yanai, further in view of Nakamura, and further in view of U.S. Patent No. 5,757,050 to Adler *et al.* (hereinafter “Adler”). Applicant respectfully traverses this rejection for *at least* the reasons set forth below.

Claim 13 incorporates all the novel and nonobvious features of its base claim 11. As already discussed above, neither the Prior Art as admitted by Applicant, Yanai, Nakamura, nor any combination thereof, teaches or suggests all the recitations of claim 11. Further, Alder fails to remedy the deficient teachings of the Prior Art as admitted by Applicant, Yanai, and Nakamura. Accordingly, Applicant submits that claim 13 is patentable over the cited references *at least* by virtue of its dependency on claim 11.

**G. Claim 14**

The Examiner has rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Prior Art as admitted by Applicant, in view of Yanai, further in view of Nakamura, and further in view of U.S. Patent No. 6,507,069 B1 to Zhang *et al.* (hereinafter “Zhang”). Applicant respectfully traverses this rejection for *at least* the reasons set forth below.

Claim 14 incorporates all the novel and nonobvious features of its base claim 11. As already discussed above, neither the Prior Art as admitted by Applicant, Yanai, Nakamura, nor any combination thereof, teaches or suggests all the recitations of claim 11. Further, Zhang fails to remedy the deficient teachings of the Prior Art as admitted by Applicant, Yanai, and Nakamura. Accordingly, Applicant submits that claim 14 is patentable over the cited references *at least* by virtue of its dependency on claim 11.

**VI. Conclusion**

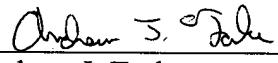
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

**Amendment Under 37 C.F.R. § 1.111  
U.S. Serial No. 10/773,333**

**Attorney Docket No.: Q77321**

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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Date: November 18, 2005

**AMENDMENTS TO THE DRAWINGS**

The Examiner has objected to the drawings alleging that they fail to show gate electrode 107 as a two-layer film as described in the specification. Accordingly, Applicant submits herewith 5 Replacement Sheets, including Figures 3(b), 3(c), 5(b), 5(c), 7, 8, 9 and 10 which show the gate electrode 107 as a two-layer film.

Attachment: (5) Replacement Sheets